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Sen. Carlin Yoder Sen. Jean Breaux Sen. Robert Deig

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Rep. Eric Koch

Rep. Ed Solidav

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# REGULATORY FLEXIBILITY COMMITTEE

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#### MEETING MINUTES<sup>1</sup>

Meeting Date: September 17, 2009

Meeting Time: 10:00 A.M.

Meeting Place: State House, 200 W. Washington

St., Senate Chamber

Meeting City: Indianapolis, Indiana

Meeting Number: 1

Members Present: Sen. James Merritt, Co-Chairperson; Sen. Edward

Charbonneau; Sen. Beverly Gard; Sen. Dennis Kruse; Sen. Jean

Leising; Sen. Carlin Yoder; Sen. Jean Breaux; Sen. Robert Deig; Sen. Sue Errington; Sen. Lonnie Randolph; Rep. Win Moses, Co-Chairperson; Rep. Matt Pierce; Rep. Ryan Dvorak; Rep. Scott Reske; Rep. Jack Lutz; Rep. Robert Behning; Rep.

David Frizzell; Rep. Eric Koch; Rep. Ed Soliday.

Members Absent: Sen. Marlin Stutzman; Rep. Kreg Battles; Rep. Sandra Blanton;

Rep. Dan Stevenson.

<sup>&</sup>lt;sup>1</sup> Exhibits and other materials referenced in these minutes can be inspected and copied in the Legislative Information Center in Room 230 of the State House in Indianapolis, Indiana. Requests for copies may be mailed to the Legislative Information Center, Legislative Services Agency, 200 West Washington Street, Indianapolis, IN 46204-2789. A fee of \$0.15 per page and mailing costs will be charged for copies. These minutes are also available on the Internet at the General Assembly homepage. The URL address of the General Assembly homepage is <a href="http://www.in.gov/legislative/">http://www.in.gov/legislative/</a>. No fee is charged for viewing, downloading, or printing minutes from the Internet.

Representative Win Moses and Senator James Merritt, Co-Chairmen of the Regulatory Flexibility Committee, convened the meeting at 10:00 a.m. Representative Moses announced that the meeting's agenda would include presentations by the Indiana Utility Regulatory Commission (IURC), the Office of Utility Consumer Counselor (OUCC), and the State Utility Forecasting Group (SUFG).

# (1) Indiana Utility Regulatory Commission:

David Lott Hardy, Chairman of the IURC, indicated that he would describe the IURC's recent work² and summarize the agency's annual reports³ on the natural gas, electricity, communications, and water and wastewater industries. After introducing his fellow Commissioners at the IURC, Chairman Hardy noted that the IURC is an active agency that employs an 80-person staff and has an \$8.6 million annual budget. While reminding legislators that the IURC does not engage in lobbying, Chairman Hardy expressed the IURC's willingness to communicate openly with legislators and the public, subject to the laws and rules governing ex parte communications. Chairman Hardy invited both legislators and the public to treat the IURC as a "library" that can be consulted for information on various utility matters.

In highlighting the IURC's activities over the past year, Chairman Hardy reported that utilities have faced more financial concerns in the past year, particularly with respect to access to needed capital. Although credit is more difficult to access as a result of the national recession, Chairman Hardy noted that credit rating agencies do consider the strength of the regulatory environment in a particular state when assigning ratings to utilities. According to Chairman Hardy, the IURC and Indiana's regulatory statutes are well regarded by the rating agencies, which ultimately assures more favorable credit ratings for utilities operating in the state.

Chairman Hardy noted that energy issues are becoming more important due to pending federal climate control legislation, regional transmission planning activities, and future infrastructure needs. He pointed out that energy infrastructure needs are closely related to water and wastewater infrastructure needs. Citing the SUFG's prediction that Indiana will need an additional 6,100 MW of electric capacity by 2015, Chairman Hardy stressed that Indiana's future energy requirements should be met through a variety of means, including conservation, energy efficiency measures, purchased power agreements, and the construction of new generating facilities. With respect to new construction, Chairman Hardy pointed out that a new nuclear power plant would take at least ten years to come online.

Other issues of concern to energy utilities include expense recovery mechanisms, such as construction work in progress (CWIP), adjustable rate mechanisms (trackers"), and the possibility of a state renewable portfolio standard (RPS). With respect to a state RPS, which would require electric utilities serving Indiana customers to supply a certain percentage of their electricity from renewable sources, Chairman Hardy cautioned that any such state standard could be preempted by a potential federal RPS. However, he suggested that there is value in discussing and planning for an RPS at the state level. While Chairman Hardy questioned the effectiveness of implementing a state RPS, he assured legislators that the IURC would enforce, and the electric utilities under its jurisdiction would comply with, any standards that might be imposed by the General

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<sup>&</sup>lt;sup>2</sup>See Exhibit 1.

#### Assembly.

On the issue of cost recovery mechanisms, Chairman Hardy reported that to date, CWIP has been used in Indiana only for Duke Energy Indiana's (DEI's) new integrated gasification combined cycle (IGCC)<sup>4</sup> plant in Edwardsport. Available under Indiana law only for clean coal technology or an air pollution control device on a coal-burning plant,<sup>5</sup> CWIP allows a utility to recover, through its rate base, certain prudently incurred construction costs while the construction is ongoing. According to Chairman Hardy, this first use of CWIP in Indiana has been implemented in an open manner, and the construction costs passed on to ratepayers are subject to periodic review by the IURC. As of the summer of 2009, construction of the Edwardsport plant was considered 30% complete.

Adjustable rate mechanisms, or "trackers," allow a utility to recover through its rates certain expenses that are largely outside the utility's control, such as fuel costs, without the utility having to bring a formal rate case. Through an expedited process, the IURC reviews the costs associated with the particular tracker. For example, a gas cost adjustment (GCA) mechanism is authorized by statute<sup>6</sup> and allows a natural gas utility to recover the commodity cost of natural gas on a timely basis through its rates. Chairman Hardy reported that on average, the GCA mechanism accounts for approximately 75% of a residential customer's gas bill, operating costs account for approximately 23%, and all other approved trackers account for less than 2%.

# Natural Gas Industry Report:

Turning to the natural gas industry report, Chairman Hardy stated that during the 2008-2009 period covered by the report, natural gas prices were extremely volatile, ranging from more than \$13 per dekatherm (Dth) during the summer of 2008, to \$3 per Dth in September 2009. Pointing out that natural gas prices are influenced by supply and demand, Chairman Hardy noted that the recent emergence of unconventional sources of natural gas, such as shale, has increased the nation's overall supply of natural gas. According to Chairman Hardy, these additional sources led to a decline in natural gas prices during the spring of 2009.

In addition to shale gas, substitute natural gas (SNG) has emerged as another alternative to conventional gas sources. In Indiana, the prospect exists to convert the state's significant coal resources into SNG through a gasification process. The SNG produced through gasification is of pipeline quality and can be used for home heating, in manufacturing, and to generate electricity.

<sup>&</sup>lt;sup>4</sup>"IGCC," or integrated gasification combined cycle, describes a power plant that uses synthetic gas ("syngas") as a source of fuel. In plants such as the one in Edwardport, syngas is produced from coal in a gasification unit. The syngas is then used as fuel in a gas turbine that produces electrical power. In addition, heat from both the gasification process and the gas turbines is recovered in boilers that produce steam. That steam, in turn, is used in steam boilers to produce additional electricity. Indiana Utility Regulatory Comm'n, Report to the Regulatory Flexibility Committee of the Indiana General Assembly 141 (2009).

<sup>&</sup>lt;sup>5</sup>See IC 8-1-2-6.6 and IC 8-1-2-6.8.

<sup>&</sup>lt;sup>6</sup>See IC 8-1-2-42(g).

Noting the importance of pipelines for the safe distribution of natural gas, Chairman Hardy reported that Indiana's pipeline infrastructure is expanding. The interstate Rockies Express Pipeline, a portion of which extends through nine Indiana counties, is expected to be operational by the end of 2009. Chairman Hardy also thanked lawmakers for enacting SEA 487 (2009), which gives the IURC authority to impose a civil penalty for noncompliance with the state's underground plant protection laws.

# Electric Industry Report:

Chairman Hardy next discussed the IURC's electric industry report. He began by reporting that Indiana's average retail electric rates were the twelfth lowest in the nation in 2008. According to Chairman Hardy, Indiana's low retail electric rates are in part due to the fact that most of the state's electricity is generated from coal, the price of which has been less volatile than that of natural gas. However, electric rates are likely to rise as long-term demand for electricity increases and new generating capacity is built.

With respect to new generating capacity, Chairman Hardy reported that DEI's new IGCC facility in Edwardsport will have a capacity of 630 MW by its expected in-service date in 2012. Wind resources will provide another source of new generating capacity for Indiana. Among all the states, Indiana has recently had the fastest growth in wind power development with a total of 1,180 MW of capacity either in-service or under construction. Additional projects are proposed.

In addition to planning for needed generation capacity, utilities must plan for the transmission facilities required to deliver that capacity. Chairman Hardy stressed that such planning must be regional in focus. The two regional transmission organizations (RTOs) that include Indiana utilities among their members<sup>7</sup> now have primary responsibility for regional transmission planning. Chairman Hardy acknowledged that RTOs are better able than individual utilities to optimize the timing, size, and location of new transmission facilities needed to serve the region. However, he pointed out that recent amendments to the Federal Power Act give the Federal Energy Regulatory Commission (FERC) increasingly broad authority over the siting, construction, and rates associated with electric transmission. With these amendments, the authority of state utility commissions to regulate these matters has been diminished.

Some states have enacted legislation authorizing the state's commission to regulate the siting of transmission facilities. Chairman Hardy explained that because the IURC does not have such authority, the United States Department of Energy (DOE) and FERC have federal statutory authority to approve the siting of transmission facilities in Indiana. According to Chairman Hardy, the ability of the state to influence transmission both within its own borders and regionally is hindered by the IURC's lack of siting authority. He urged the General Assembly to consider legislation to grant the IURC siting authority for transmission facilities.

<sup>7</sup>The two RTOs operating in Indiana are the Midwest Independent System Operator (Midwest ISO) and PJM Interconnection, LLC (PJM). DEI, NIPSCO, Indianapolis Power & Light (IPL), SIGECO, Hoosier Energy, Indiana Municipal Power Agency (IMPA), and Wabash Valley Power Association (WVPA) are all members of the Midwest ISO, which is headquartered in Carmel. Indiana Michigan Power (I&M) is a member of PJM, which is headquartered in Valley Forge, Pennsylvania. Indiana Utility Regulatory Comm'n, Report to the Regulatory Flexibility Committee of the Indiana General Assembly 39-40 (2009).

Planning for new generation and transmission facilities is complicated by uncertainties surrounding possible federal legislation to regulate carbon emissions. Chairman Hardy noted that under the Waxman-Markey bill, which proposes a cap-and-trade system for carbon emissions, Indiana customers could see a significant increase in electric rates over time, due to the state's heavy reliance on coal as a fuel for electricity production. He further noted that if Congress does not pass legislation to limit carbon emissions, the U.S. Supreme Court has ruled that the U.S. Environmental Protection Agency (EPA) could act administratively to do so.<sup>9</sup>

Finally, Chairman Hardy reported that the IURC has opened an investigation (Cause No. 43663) into the tree-trimming practices of electric utilities. Noting that the Committee heard extensive testimony on these practices during the 2008 interim, Chairman Hardy assured legislators that the public would be able to comment on the issue at six hearings that the IURC will conduct throughout the state.

### Communications Industry Report:

Focusing next on the communications industry, Chairman Hardy noted that the IURC's role with respect to communications service providers has changed since the enactment of HEA 1279 (2006), which largely deregulated communications service in Indiana. According to Chairman Hardy, the IURC's role has shifted from regulator to market monitor, with the IURC now responsible for observing how the market for communications service is reacting to the framework established by HEA 1279 and reporting those findings to the General Assembly.

Under HEA 1279, the IURC is also required, on a biennial basis, to identify and eliminate rules and policies concerning telecommunications service that are "no longer necessary in the public interest or for the protection of consumers." Chairman Hardy reported that staff has reviewed the IURC's telecommunications rules and has identified those rules that should be eliminated, modified, or retained. Such changes will be reflected in a future rulemaking by the IURC.

Under federal law, the IURC continues to oversee the assignment and approval process for implementing new area codes in Indiana. Aware that implementing new area codes can be expensive for businesses and disruptive to residential customers, the IURC attempts to leverage existing area codes through number conservation measures such as number pooling. Only when it becomes necessary, and only after considering the costs and benefits of doing so, will the IURC order new area code implementation.

Finally, Chairman Hardy indicated that in the last year, two communications industry mergers were announced that will directly affect Indiana providers and consumers. The first merger involved CenturyTel acquiring Embarq, and the second merger involved Frontier acquiring Verizon's wireline properties. Both mergers have focused on expanding services to rural areas.

<sup>&</sup>lt;sup>8</sup>The American Clean Energy and Security Act of 2009 (H.R. 2454) was introduced by U.S. Representatives Henry Waxman (D-CA) and Edward Markey (D-MA). It passed the House of Representatives on June 26, 2009, and has been received in the Senate, where it awaits action.

<sup>&</sup>lt;sup>9</sup>Massachusetts v. U.S. Environmental Protection Agency, 549 U.S. 497 (2007).

<sup>&</sup>lt;sup>10</sup>See IC 8-1-2.6-4.1.

## Water and Wastewater Industry Report:

While addressing water and wastewater utilities last, Chairman Hardy noted that issues affecting these industries are assuming an increasingly prominent role in the IURC's workload. First, increased demand has impacted water utilities. While water usage continues to rise, water availability varies from year to year based on weather patterns. Although Indiana generally has not suffered from water shortages, weather can have a dramatic impact on resource availability during the summer. Consequently, utilities are increasingly emphasizing water conservation and efficiency programs to guard against any imbalance between supply and demand. Chairman Hardy suggested that future economic development efforts in the Indianapolis area in particular will be affected by the region's ability to provide an adequate water supply to businesses and residents.

An issue that poses significant challenges to both water and wastewater utilities is that of aging infrastructure. Replacing or upgrading this infrastructure is made difficult by the fact that water and wastewater utilities have the highest capital costs of any utility sector. While the American Recovery and Reinvestment Act (ARRA) is providing \$122 million for water and wastewater projects in Indiana, this assistance falls far short of the amount needed.

In addition to supply and infrastructure concerns, the financial health of small utilities also represents a challenge within the sector. Chairman Hardy reported that the IURC is actively monitoring certain small utilities as part of an effort to prevent these utilities from becoming financially troubled. The IURC also has implemented new policies to reduce costs and simplify regulatory procedures for small water utilities. For example, the IURC recently approved a flat-fee charge for rate cases filed by small municipal utilities, reducing the charges that the IURC would otherwise assess. Chairman Hardy argued that small utilities could further benefit from the expansion of an existing statute that allows expedited rate cases and other regulatory procedures for utilities that serve less than 5,000 customers. Chairman Hardy encouraged lawmakers to amend the statute to give the IURC flexibility to administratively alter the threshold number of customers that qualifies a small utility for the streamlined procedures available under the statute.

As an additional legislative recommendation, Chairman Hardy urged legislators to amend the existing statute concerning the distribution system improvement charge ("DSIC") for water utilities. Explaining that the statute provides a rate adjustment mechanism that allows water utilities to recover certain costs associated with distribution system improvements, Chairman Hardy suggested that the statute should be amended to include wastewater utilities.

After concluding his report on the water and wastewater industries, Chairman Hardy invited questions from the Committee. Representative Moses expressed concerns about the use of the CWIP cost recovery mechanism for DEI's new IGCC plant in Edwardsport. Noting that cost estimates for the project have increased several times, he asked whether the IURC would ever limit the amount of costs that DEI is allowed to recover through CWIP. Chairman Hardy explained that CWIP benefits a utility by allowing it to recover capital costs during the construction period. Without CWIP, such costs would be have to be financed by the utility and would in turn be subject to additional costs. Chairman Hardy noted that Indiana law allows costs used for CWIP recovery to be based on estimates. He

<sup>&</sup>lt;sup>11</sup>See IC 8-1-2-61.5.

<sup>&</sup>lt;sup>12</sup>See IC 8-1-31.

explained that the cost of the Edwardsport plant was originally estimated to be \$1.985 billion. After a second set of hearings, the IURC approved a total estimated cost of \$2.35 billion for the plant. However, this total does not include a \$17 million study that the IURC approved in a separate sub-docket for DEI to analyze the feasibility of incorporating carbon capture technology at the plant. Representative Moses then asked whether Chairman Hardy considered these approved costs to be in the interest of consumers. Chairman Hardy stated that he did.

Representative Pierce next raised a number of concerns with respect to the communications industry. For example, he noted that once the transition to a deregulated industry under HEA 1279 was completed in July 2009, he received a notice from AT&T that his monthly bill would increase from \$10.48 to \$13. He questioned whether AT&T would raise its monthly rates if the competitive telecommunications environment that was the justification for HEA 1279 were in fact a reality. Chairman Hardy turned to Commissioner Larry Landis for a response. Commissioner Landis suggested that AT&T might not be in a position to reduce a monthly bill if its costs for providing additional services have not decreased. He urged Representative Pierce to consider whether his telecommunications services are part of a package or bundle of other services and whether the increase in his monthly bill could be attributed to those other services.

Representative Pierce also expressed frustration with the IURC's handling of a complaint by the City of Bloomington concerning its inability to obtain a PEG channel<sup>13</sup> as part of the video service provided by AT&T in the area. According to Representative Pierce, when city officials asked the IURC to investigate the matter, they were told that they would have to file a formal complaint. Arguing that the city does not have the resources or technical expertise to become involved in formal proceeding before the IURC, Representative Pierce asked why the IURC could not simply investigate the matter outside of an adjudicatory proceeding. Chairman Hardy agreed to look into the matter.

Returning to the electric industry, Senator Randolph asked for further explanation of how trackers work. Chairman Hardy explained that Indiana statutes provide trackers for both expenses and capital investments. An expense tracker allows a utility to recover expenses that are characterized as largely outside the utility's control and materially significant. An expense tracker allows these expenses to be reflected in a utility's retail rates outside a base rate case but does not allow for a return on the expenses. A capital investment tracker, on the other hand, allows a utility to reflect certain clean coal and generation capital costs in its rates, along with the associated return on the investments. Because capital investment trackers reduce the amount of time between the date capital expenditures are made and the date a utility recovers its costs for those expenditures, they are favorably viewed by credit rating agencies.

Senator Randolph then asked whether the IURC has any discretion with respect to approving trackers. Chairman Hardy answered that it depends on the particular tracker. Some trackers are statutorily mandated, including the tracker for pollution control equipment. However, the IURC has discretion to allow other trackers under the alternative regulatory statute (IC 8-1-2.5), which authorizes the IURC to adopt alternative regulatory practices and rate mechanisms.

Senator Breaux asked whether tracker mechanisms trigger any automatic reviews by the IURC of the costs being recovered. Chairman Hardy indicated that one of the most

<sup>&</sup>lt;sup>13</sup>A PEG channel is a channel made available by a video service provider for public, educational, and governmental programming. See IC 8-1-34-25(b).

commonly used trackers, the fuel adjustment clause (FAC), which allows electric utilities to recover their costs for purchased fuel, includes a process by which such costs are regularly tracked and reviewed. He further explained that as more trackers have been approved, the number of requests by utilities for increases in their base rates has declined. Nevertheless, as required by statute, 14 the IURC has established a process by which the basic rates and charges of all utilities are subject to a regularly scheduled, periodic review by the IURC.

## (2) Office of Utility Consumer Counselor:

Following the presentation of the IURC's annual reports, the Committee heard from David Stipler, Indiana's Utility Consumer Counselor. Mr. Stipler reminded the Committee that the OUCC is an independent state agency that represents the interests of residential and business utility customers before the IURC, federal regulatory agencies, and state and federal appellate courts. He reported that the OUCC has a current staff of 51 utility professionals, along with a 10-person legal team. The technical and legal divisions handle a diverse caseload, which includes participating in base rate cases, auditing utilities' fuel and gas costs, and monitoring the development of new technologies in the various utility sectors.

Mr. Stipler explained that the OUCC's mission of representing consumers consists of three main elements: dedicated advocacy, consumer education, and creative problem solving. He indicated that he would describe the OUCC's recent activities in each area.

With respect to the OUCC's advocacy efforts, Mr. Stipler reported that during the state fiscal year ending June 30, 2009, there were 351 new cases that were opened with the OUCC. Currently, the OUCC has 270 open and active cases pending before the IURC. One recent case before the IURC in which the OUCC was involved was a base rate case filed by Indiana Michigan Power (I&M) in 2007 (Cause No. 43306). Representing the first base rate case filed by I&M in fifteen years, the proceedings resulted in a settlement agreement approved by the IURC in an order issued March 4, 2009. Under the terms of the settlement, I&M will receive about one-third of its requested increase in annual revenues. Additionally, I&M will be required to file a new rate case within five years of the IURC's order.

The OUCC is also involved in a pending base rate case filed by NIPSCO in 2008 (Cause No. 43526). It is the first base rate case for NIPSCO in over two decades. The case includes a request by NIPSCO for an \$85.7 million revenue increase. Based on its own analysis, the OUCC has recommended that NIPSCO's revenue should actually be decreased and that residential rates should remain at or near current levels.

With respect to a topic that is generating significant public interest, the OUCC has filed testimony in the IURC's open investigation into the tree trimming and vegetation management practices of electric utilities (Cause No. 43663). In its filed testimony, the OUCC has recommended that the IURC establish uniform vegetation management standards for all electric utilities under its jurisdiction. These standards should establish guidelines for advance notice to property owners before trimming, appropriate dispute resolution procedures, and improved customer education and outreach practices. Mr. Stipler maintained that any standards adopted must balance the needs of utilities to adopt

<sup>&</sup>lt;sup>14</sup>See IC 8-1-2-42.5.

<sup>&</sup>lt;sup>15</sup>See Exhibit 3.

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practices that ensure the reliability of the electric system against the concerns of private landowners regarding the value and enjoyment of their property.

In the natural gas arena, the OUCC has weighed in on a joint petition to the IURC by Citizens Gas, Vectren, and NIPSCO to reinstate the utilities' expired universal service programs (USPs) to provide discounted winter heating bills for low-income customers (Cause No. 43669). In this matter, the OUCC has recommended that the USPs be reinstated, that the programs be standardized to ensure equal treatment for all ratepayers, and that the utilities assume an increased share of the program costs, which under the expired programs were partly borne by all ratepayers. Mr. Stipler noted that the utilities have proposed requiring customers seeking assistance under their respective USPs to apply for funds to weatherize their homes in order to take advantage of the increased allocation of such funds made available to Indiana under ARRA.

Turning to the OUCC's efforts to engage in creative problem solving, Mr. Stipler reported that the OUCC continues to monitor various issues concerning DEI's IGCC project in Edwardsport, including efforts to study the potential use of carbon capture and storage technology at the plant. It has also supported applications by DEI and Vectren to receive ARRA funds made available through the DOE to accelerate "smart grid" development and a recently implemented smart metering pilot program by I&M in South Bend. 17

Also in the energy area, the OUCC has supported an application by the National Association of State Utility Consumer Advocates (NASUCA) to the DOE for ARRA funds for its membership to participate in regional transmission planning. Additionally, the OUCC has a new, ongoing consultative role with the Indiana Finance Authority (IFA) under SEA 423 (2009), which authorizes the IFA to enter into contracts for the purchase and sale of SNG from coal gasification facilities for ultimate delivery to retail customers. The OUCC also serves on three oversight boards governing energy efficiency and rate decoupling 18 programs for Indiana's largest natural gas utilities.

<sup>&</sup>lt;sup>16</sup>A "smart grid" electricity delivery system encompasses devices and technologies designed to improve the efficiency of energy use and the transfer of energy across the system. Indiana Utility Regulatory Comm'n, Report to the Regulatory Flexibility Committee of the Indiana General Assembly 146 (2009).

<sup>&</sup>lt;sup>17</sup>Smart meters use two-way communications to allow for real-time or near real-time electric consumption data to be transmitted between a customer's electric meter and the electric utility serving the premises. Such meters can be used to reduce the electric load, localize and minimize outages, and facilitate more accurate pricing. Indiana Utility Regulatory Comm'n, Report to the Regulatory Flexibility Committee of the Indiana General Assembly 63 (2009).

<sup>&</sup>lt;sup>18</sup>Decoupling is an alternative rate mechanism that separates, or "decouples," the recovery of a utility's fixed costs (i.e., its non-commodity costs) from the volume of natural gas sold. Under a traditional ratemaking structure, a utility recovers fixed costs based on the volume of natural gas sold. As a result, the utility can fully recover fixed costs only when customers consume a certain threshold volume of natural gas. This structure provides a disincentive for utilities to promote energy efficiency. Decoupling removes this disincentive by separating cost recovery from the volume of gas sold. Indiana Utility Regulatory Comm'n, Report to the Regulatory Flexibility Committee of the Indiana General Assembly 29-30 (2009).

With respect to communications service, the OUCC, along with the IURC, has participated in a workgroup to assist the Indiana Office of Technology in applying for a \$3.4 million broadband mapping grant from the U.S. Department of Commerce's National Telecommunications and Information Administration (NTIA).<sup>19</sup> Funded by money made available through ARRA, the grant program is designed to allow states to collect and verify data on the availability, speed, and location of broadband infrastructure within their borders.

Finally, Mr. Stipler discussed the OUCC's consumer education function. He shared with the Committee the OUCC's web site address (<a href="www.IN.gov/oucc">www.IN.gov/oucc</a>) and toll-free telephone number (1-888-441-2494), both of which are available to receive questions and complaints from citizens. He stressed that the OUCC is available to legislators, other governmental entities, and the public as a resource for information on utility matters. As an example of one of the agency's recent outreach efforts, Mr. Stipler described the OUCC's participation in the "Hoosiers Care" initiative, a multi-agency program promoting energy conservation throughout the state.

Before concluding his remarks, Mr. Stipler outlined the challenges the OUCC foresees for the various utility sectors. With respect to the energy industry, Mr. Stipler predicted that the OUCC will devote substantial time and resources to utility base rate cases in the near future. He also highlighted the challenges that utilities will face in having to plan for additional generation and transmission capacity, replace aging infrastructure, and meet new environmental standards. For example, Mr. Stipler cited a study suggesting that the enactment of a federal RPS requiring 20% of the nation's electricity to be generated from renewable sources would require an investment of \$80 billion in new transmission infrastructure in the region.

In the water and wastewater sector, Mr. Stipler cited the need to replace aging infrastructure as a looming challenge. The need for utilities and communities to provide a sufficient and quality water supply also presents concerns. He further noted that utilities across all sectors will face labor challenges due to an aging workforce along with financial challenges due to restricted access to capital.

Finally, the OUCC itself faces staffing challenges as it strives to maintain a level of expertise in the face of utility matters that are growing in both number and complexity. Mr. Stipler predicted that the agency will need to supplement the work of OUCC analysts with consultants who have construction management and engineering expertise.

After concluding his presentation, Mr. Stipler took questions from the Committee. Representative Moses expressed concern about the cost of DEI's IGCC plant in Edwardsport. He asked whether the OUCC reviews the amount of CWIP recovery granted for the project. Mr. Stipler replied that the OUCC prefiled testimony in the proceeding before the IURC and continues to monitor construction of the project.

Senator Randolph asked for the OUCC's position on the Waxman-Markey bill. Mr. Stipler pointed to the United States Supreme Court's determination that the EPA could act administratively to regulate carbon emissions if Congress fails to do so. Mr. Stipler predicted that regardless of whether carbon control measures are passed by Congress or ultimately emanate from the EPA, the effect of such measures could be detrimental to Indiana's economy, given its heavy reliance on coal as an electricity source.

<sup>&</sup>lt;sup>19</sup>On October 5, 2009, NTIA announced that Indiana was awarded one of the first four grants under the program. The state will receive \$1.3 million.

Representative Dvorak asked what percentage of the OUCC's 270 open cases before the IURC were initiated by consumers. Mr. Stipler estimated that less than 5% of the open cases were the result of consumer complaints. He explained that most cases before the IURC involve petitions or complaints filed by utilities. Representative Dvorak additionally asked whether the OUCC measures its own success rate with respect to these cases. Mr. Stipler indicated that the OUCC monitors, on a monthly basis, its success in meeting a number of "key performance indicators," or KPI. He agreed to provide the Committee with recent KPI data. Mr. Stipler cited the settlement agreement with I&M in which the utility ultimately received one-third of the revenue increase it requested as an example of one of the agency's recent successes.

# (3) State Utility Forecasting Group:

Next, Doug Gotham, Director of the SUFG, presented the 2009 Indiana Renewable Energy Resources Study.<sup>20</sup> He began by presenting a graph showing historical trends in the use of various renewable energy sources in the United States. The graph revealed that hydroelectric power was the nation's most widely used source of renewable energy until 1999 when biomass took over as the predominant source. In Indiana, biomass has accounted for the largest share of Indiana's total use of renewables since 1960, as shown by a similar graph demonstrating the percentage share of Indiana's total energy consumption attributable to various renewable sources over time. Dr. Gotham explained that the historical predominance of biomass in Indiana is largely due to the state's use of wood waste.

As a percentage of overall consumption, renewable resources comprised just 6.7% of the nation's total energy consumption in 2007. In Indiana, the figure was even lower, with renewables representing less than 1.5% of total energy consumption. Having noted the insignificance of renewables with respect to both energy consumption and electricity production both nationally and in Indiana, Dr. Gotham described some of the barriers to more widespread use of these alternative energy sources. First, he stressed that cost is the major barrier, with most renewable technologies having high capital costs for needed infrastructure and equipment. According to the DOE's Energy Information Administration (EIA), Indiana had the ninth lowest electricity rates in the country in 2007 (6.5¢/kWh, versus a national average of 9.13¢/kWh). Dr. Gotham posited that in this low cost environment developers may forego making significant capital investments in renewable generation and suggested that consumers would not be willing to pay a premium for renewables-based electricity. A second barrier to the implementation of alternative sources in Indiana and other parts of the country is the intermittent nature of sources such as wind and solar power.

In an attempt to overcome these barriers, both the state and federal governments, along with individual electric utilities, have implemented a number of incentives designed to encourage the development and use of renewable energy resources. The federal government has continued to extend the production tax credit and to offer various grant programs. In Indiana, grant programs, tax incentives, and a net metering rule<sup>21</sup> have been

<sup>&</sup>lt;sup>20</sup>See Exhibits 4 and 5. IC 8-1-8.8-14 requires the SUFG to "conduct an annual study on the use, availability, and economics of using renewable energy resources in Indiana" for inclusion in the IURC's annual report to the Committee.

<sup>&</sup>lt;sup>21</sup>Codified at 170 IAC 4.2, Indiana's net metering rule allows a utility customer who owns and operates a small solar, wind, or hydroelectric generating facility to connect to the utility's electric grid and to offset all or part of the customer's own electricity requirements by returning

implemented. A number of electric utilities serving Indiana offer optional "green pricing" programs, which allow customers to pay a premium to receive a portion of their electricity from renewable sources.

Dr. Gotham then discussed a number of specific renewable energy sources and their current and potential uses in Indiana. He reported that wind has been one of fastest growing renewable energy sources in Indiana. Two wind farms (with a combined 530 MW capacity) are currently operating in Benton County, and three more projects (with a combined 506 MW capacity) are under construction in Benton and White Counties. A 350 MW project in Benton County is pending before the IURC, and additional projects have been proposed in Tippecanoe, Montgomery, Fountain, Benton, White, Randolph, Howard, and Boone Counties. In addition to these development activities, several electric utilities serving Indiana customers have entered into purchased power agreements with wind farms in Indiana and other states.

Dr. Gotham noted the recent attention given to ethanol and biodiesel, which are produced from corn and soybeans, respectively, and used as transportation fuels. Other energy crops that could be used in Indiana include fast growing hardwood trees and switchgrass. However, there are a number of economic hurdles to the use of energy crops, including harvesting and transportation costs, other high-value uses for land, and lower prices for competing fossil fuels.

According to Dr. Gotham, organic waste biomass (primarily in the form of wood waste) represents Indiana's single largest source of renewable energy in terms of overall consumption. With respect to electricity production, organic waste biomass represents the third largest renewable source of electricity generation in Indiana. Such generation is mainly fueled by landfill gas, municipal solid waste, animal waste bio-gas, and byproducts from wastewater treatment.

Because of a lack of annual solar radiation, Indiana has relatively little potential for significant use of solar thermal energy or photovoltaic cells. In addition, these technologies have high costs relative to traditional energy technologies. However, there is some potential in Indiana for heating water and buildings using flat-plate collectors.

While fuel cells have received much attention in recent years, the cells currently available cost about \$2,500/kW, which is roughly twice the cost of a natural gas-fired combustion turbine. Still, Dr. Gotham acknowledged that considerable research has been devoted to the challenges associated with the technology, including cost barriers and concerns about hydrogen production and storage.

Hydropower is the renewable source used most often to generate electricity, both nationally and in Indiana. Indiana has about 60 MW of hydroelectric generating capacity, and the DOE has identified another 66 MW of potential hydropower at existing dams. However, this potential hydropower is spread over 27 sites, and only about 42 MW of the potential capacity is considered viable.

Finally, as required by HEA 1033 (2009), Dr. Gotham discussed renewable energy generation opportunities from algae production systems.<sup>22</sup> He pointed to several

any excess electricity the customer generates back to the power grid.

<sup>22</sup>HEA 1033 (2009) amended IC 8-1-8.8-14 to provide that in formulating suggestions to encourage the development and use of renewable energy resources and technologies in Indiana.

advantages offered by this emerging source of biomass, including its rapid physical growth and efficient conversion of sunlight, along with its higher oil content relative to other biomass sources. Because it is not a food crop, algae can be used as a fuel source without detracting from the food supply. It is also grown in water and on land that is not usable for other agriculture. However, the cost of harvesting and processing algae for use as a biofuel is high. For example, it can be costly to remove water from the algae during processing. Dr. Gotham explained that there are two types of algae production systems: open pond systems and enclosed bioreactors. While open pond systems are less costly than enclosed systems, they are vulnerable to contamination, water evaporation, and weather extremes. With an enclosed bioreactor, the growth environment can be better controlled, but at a significantly higher cost.

After concluding his presentation, Dr. Gotham answered questions from Committee members. Representative Moses asked whether Dr. Gotham could give the Committee a preview of the SUFG's biennial energy forecast. Dr. Gotham indicated that the SUFG had completed its modeling for the 2009 forecast, which in general predicted future energy demand in Indiana to be less than that predicted in the 2007 forecast, due mainly to economic factors. He testified that the SUFG is gathering feedback on its preliminary report and that the final report would be publicly available by the end of October.

Senator Breaux asked whether the SUFG examines only the direct costs of various renewable energy sources or whether it considers the indirect costs of not employing these alternative sources of energy. Dr. Gotham replied that the SUFG typically looks at the costs of various energy sources under the laws and regulations in place at the time of the analysis. However, in a special report it prepared last year, <sup>23</sup> the SUFG examined the potential costs of electricity in Indiana under the proposed Lieberman-Warner Climate Security Act (S. 2191), which would have placed a declining cap on greenhouse gas emissions. The report focused on the impacts of the proposed emissions limits on the electric energy sector of the economy and did not address the environmental or societal benefits of reduced emissions.

Representative Dvorak asked about the SUFG's success rates with respect to its previous energy forecasts. Dr. Gotham responded that the SUFG has been more successful at predicting demand for residential and commercial customers than for industrial customers. Its estimates are also most accurate with respect to the intermediate years covered by a forecast. Dr. Gotham pointed out that the forecasts always include alternative high and low demand projections to demonstrate a range of possible demand scenarios.

There being no further business, Senator Merritt adjourned the meeting at 1:10 p.m.

the SUFG "shall evaluate potential renewable energy generation opportunities from biomass and algae production systems."

<sup>&</sup>lt;sup>23</sup>State Utility Forecasting Group, The Projected Impacts of Carbon Dioxide Emissions Reduction Legislation on Electricity Prices in Indiana (2008).